

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: US 09 840 243 A

Source: OIPR

Date Processed by STIC: 10/29/01

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
<http://www.uspto.gov/web/offices/pac/checker>

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/940243A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPIIA" HEADERS, WHICH WERE INSERTED BY P

1 Wrapped Nucleic
Wrapped Aminos

The number(s) at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to 3; this will prevent "wrapping."

2 Invalid Line Length

The rules require that a line not exceed 72 characters in length. This includes white spaces.

3 Misaligned Amino
Numbering

The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4 Non-ASCII

The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5 Variable Length

Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>.<223> section that some may be missing.

6 PatentIn 2.0
"bug"

A "bug" in PatentIn version 2.0 has caused the <220>.<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>.<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>.<223> sections for Artificial or Unknown sequences.

7 Skipped Sequences
(OLD RULES)

Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(ii) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8 Skipped Sequences
(NEW RULES)

Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence
<210> sequence id number
<400> sequence id number
000

9 Use of n's or Xaa's
(NEW RULES)

Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>.<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents

10 Invalid <213>
Response

Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>.<223> section is required when <213> response is Unknown or Artificial Sequence

11 Use of <220>

Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

12 PatentIn 2.0
"bug"

Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13 Misuse of n

n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

OIPE

RAW SEQUENCE LISTING DATE: 10/29/2001
PATENT APPLICATION: US/09/840,243A TIME: 13:29:31

Input Set : A:\B3991AB_SQL.txt
Output Set: N:\CRF3\10292001\I840243A.raw

32 Err^o ^{ed} check dis little

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/840,243A

DATE: 10/29/2001
TIME: 13:29:31

Input Set : A:\B3991AB_SQL.txt
Output Set: N:\CRF3\10292001\I840243A.raw

74 <220> FEATURE:
75 <223> OTHER INFORMATION: Description of Artificial Sequence:primer
77 <400> SEQUENCE: 5
78 ccagctctag actccaccac tctcaccaac 30
81 <210> SEQ ID NO: 6
82 <211> LENGTH: 30
83 <212> TYPE: DNA
84 <213> ORGANISM: Artificial Sequence
86 <220> FEATURE:
87 <223> OTHER INFORMATION: Description of Artificial Sequence:primer
89 <400> SEQUENCE: 6
90 ctttcgaatt ctcgtcttt tgccaggatg 30
93 <210> SEQ ID NO: 7
94 <211> LENGTH: 30
95 <212> TYPE: DNA
96 <213> ORGANISM: Artificial Sequence
98 <220> FEATURE:
99 <223> OTHER INFORMATION: Description of Artificial Sequence:primer
101 <400> SEQUENCE: 7
102 gtttctctag attggcagca ctggggatag 30
105 <210> SEQ ID NO: 8
106 <211> LENGTH: 30
107 <212> TYPE: DNA
108 <213> ORGANISM: Artificial Sequence
110 <220> FEATURE:
111 <223> OTHER INFORMATION: Description of Artificial Sequence:primer
113 <400> SEQUENCE: 8
114 gctacgaatt ccagcagaca cagccaaac 30
117 <210> SEQ ID NO: 9
118 <211> LENGTH: 69
119 <212> TYPE: DNA
120 <213> ORGANISM: Artificial Sequence
122 <220> FEATURE:
123 <223> OTHER INFORMATION: Description of Artificial Sequence:primer
125 <400> SEQUENCE: 9
126 ccgtacgcgt ctagaatgga ttacaaagac gatgacgata agatggagct tacccagcct 60
128 gcagaagac 69
131 <210> SEQ ID NO: 10
132 <211> LENGTH: 1345
133 <212> TYPE: DNA
134 <213> ORGANISM: Homo sapiens
136 <220> FEATURE:
137 <221> NAME/KEY: CDS
138 <222> LOCATION: (418)..(1200)
140 <400> SEQUENCE: 10
141 acgcaggaa ggagggcacac ccgggggtgg cgcaatgagg agggggcgcg acggccagga 60
143 gctgggtgga ggcacacca ggcaggagag gggaaagaac tctctccctt tctgaacccc 120
145 ctttccttg agagacgagt tgggggagtc ctccacgcat tacccactcg ggccgcaaaa 180
147 actcccttct ttagccctct gcggggcccc ttgcttataa gcctttgaga ccgcagaagg 240

RAW SEQUENCE LISTING

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Input Set : A:\B3991AB_SQL.txt

Output Set: N:\CRF3\10292001\I840243A.raw

149 gacttgttg tggaacggga cggccaagag gaagccagat cgctgagggt ccggtctcca 300
 151 gttgcctcc tgctatatcc attggaagag aaaagttgt gacttgggcc cccaaatttt 360
 153 gagagaactg ggcttcggc ggggggggac agaggaggct cgtggggagc tttcccc 417
 155 atg gag ctt acc cag cct gca gaa gac ctc atc cag acc cag acc 465
 156 Met Glu Leu Thr Gln Pro Ala Glu Asp Leu Ile Gln Thr Gln Thr
 157 1 5 10 15
 159 cct gcc tca gaa ctt ggg gac cct gaa gac ccc gga gag gag gct gca 513
 160 Pro Ala Ser Glu Leu Gly Asp Pro Glu Asp Pro Gly Glu Ala Ala
 161 20 25 30
 163 gat ggc tca gac act gtg gtc ctc agt ctc ttt ccc tgc acc cct gag 561
 164 Asp Gly Ser Asp Thr Val Val Leu Ser Leu Phe Pro Cys Thr .Pro Glu
 165 35 40 45
 167 cct gtg aat cct gaa ccg gat gcc agt gtt tcc tct cca cag gca ggc 609
 168 Pro Val Asn Pro Glu Pro Asp Ala Ser Val Ser Ser Pro Gln Ala Gly
 169 50 55 60
 171 agc tcc ctg aag cac tcc acc act ctc acc aac cgg cag cga ggg aac 657
 172 Ser Ser Leu Lys His Ser Thr Thr Leu Thr Asn Arg Gln Arg Gly Asn
 173 65 70 75 80
 175 gag gtg tca gct ctg ccg gcc acc cta gac tcc ctg tcc atc cac cag 705
 176 Glu Val Ser Ala Leu Pro Ala Thr Leu Asp Ser Leu Ser Ile His Gln
 177 85 90 95
 179 ctc gca gca cag ggg gag ctg gac cag ctg aag gag cat ttg cgg aaa 753
 180 Leu Ala Ala Gln Gly Glu Leu Asp Gln Leu Lys Glu His Leu Arg Lys
 181 100 105 110
 183 ggt gac aac ctc gtc aac aag cca gac gag cgc ggc ttc acc ccc ctc 801
 184 Gly Asp Asn Leu Val Asn Lys Pro Asp Glu Arg Gly Phe Thr Pro Leu
 185 115 120 125
 187 atc tgg gcc tcc gcc ttt gga gag att gag acc gtt cgc ttc ctg ctg 849
 188 Ile Trp Ala Ser Ala Phe Gly Glu Ile Glu Thr Val Arg Phe Leu Leu
 189 130 135 140
 191 gag tgg ggt gcc gac ccc cac atc ctg gca aaa gag cga gag agc gcc 897
 192 Glu Trp Gly Ala Asp Pro His Ile Leu Ala Lys Glu Arg Glu Ser Ala
 193 145 150 155 160
 195 ctg tcg ctg gcc agc aca ggc ggc tac aca gac att gtg ggg ctg ctg 945
 196 Leu Ser Leu Ala Ser Thr Gly Gly Tyr Thr Asp Ile Val Gly Leu Leu
 197 165 170 175
 199 ctg gag cgt gac gtg gac atc aac atc tat gat tgg aat gga ggg acg 993
 200 Leu Glu Arg Asp Val Asp Ile Asn Ile Tyr Asp Trp Asn Gly Gly Thr
 201 180 185 190
 203 cca ctg ctg tac gct gtg cgc ggg aac cac gtg aaa tgc gtt gag gcc 1041
 204 Pro Leu Leu Tyr Ala Val Arg Gly Asn His Val Lys Cys Val Glu Ala
 205 195 200 205
 207 ttg ctg gcc cga ggc gct gac ctc acc acc gaa gcc gac tct ggc tac 1089
 208 Leu Leu Ala Arg Gly Ala Asp Leu Thr Thr Glu Ala Asp Ser Gly Tyr
 209 210 215 220
 211 acc ccg atg gac ctt gcc gtg gcc ctg gga tac cgg aaa gtg caa cag 1137
 212 Thr Pro Met Asp Leu Ala Val Ala Leu Gly Tyr Arg Lys Val Gln Gln
 213 225 230 235 240
 215 gtg atc gag aac cac atc ctc aag ctc ttc cag agc aac ctg gtg ccc 1185

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216 Val Ile Glu Asn His Ile Leu Lys Leu Phe Gln Ser Asn Leu Val Pro
217 245 250 255
219 gct gac cct gag tga aggccgcctg ccggggactc agacactcag ggaacaaaaat 1240
220 Ala Asp Pro Glu
221 260
223 ggtcagccag agctgggaa acccagaact gacttcaaag gcagcttctg gacaggtgg 1300
225 gggaggggac ccttcccaag aggaaccaat aaaccttctg tgcag 1345
228 <210> SEQ ID NO: 11
229 <211> LENGTH: 260
230 <212> TYPE: PRT
231 <213> ORGANISM: Homo sapiens
233 <400> SEQUENCE: 11
234 Met Glu Leu Thr Gln Pro Ala Glu Asp Leu Ile Gln Thr Gln Gln Thr
235 1 5 10 15
237 Pro Ala Ser Glu Leu Gly Asp Pro Glu Asp Pro Gly Glu Glu Ala Ala
238 20 25 30
240 Asp Gly Ser Asp Thr Val Val Leu Ser Leu Phe Pro Cys Thr Pro Glu
241 35 40 45
243 Pro Val Asn Pro Glu Pro Asp Ala Ser Val Ser Ser Pro Gln Ala Gly
244 50 55 60
246 Ser Ser Leu Lys His Ser Thr Thr Leu Thr Asn Arg Gln Arg Gly Asn
247 65 70 75 80
249 Glu Val Ser Ala Leu Pro Ala Thr Leu Asp Ser Leu Ser Ile His Gln
250 85 90 95
252 Leu Ala Ala Gln Gly Glu Leu Asp Gln Leu Lys Glu His Leu Arg Lys
253 100 105 110
255 Gly Asp Asn Leu Val Asn Lys Pro Asp Glu Arg Gly Phe Thr Pro Leu
256 115 120 125
258 Ile Trp Ala Ser Ala Phe Gly Glu Ile Glu Thr Val Arg Phe Leu Leu
259 130 135 140
261 Glu Trp Gly Ala Asp Pro His Ile Leu Ala Lys Glu Arg Glu Ser Ala
262 145 150 155 160
264 Leu Ser Leu Ala Ser Thr Gly Gly Tyr Thr Asp Ile Val Gly Leu Leu
265 165 170 175
267 Leu Glu Arg Asp Val Asp Ile Asn Ile Tyr Asp Trp Asn Gly Gly Thr
268 180 185 190
270 Pro Leu Leu Tyr Ala Val Arg Gly Asn His Val Lys Cys Val Glu Ala
271 195 200 205
273 Leu Leu Ala Arg Gly Ala Asp Leu Thr Thr Glu Ala Asp Ser Gly Tyr
274 210 215 220
276 Thr Pro Met Asp Leu Ala Val Ala Leu Gly Tyr Arg Lys Val Gln Gln
277 225 230 235 240
279 Val Ile Glu Asn His Ile Leu Lys Leu Phe Gln Ser Asn Leu Val Pro
280 245 250 255
282 Ala Asp Pro Glu
283 260
292 <210> SEQ ID NO: 12
293 <211> LENGTH: 260
294 <212> TYPE: PRT

RAW SEQUENCE LISTING

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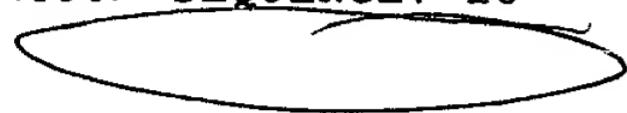
Input Set : A:\B3991AB_SQL.txt

Output Set: N:\CRF3\10292001\I840243A.raw

295 <213> ORGANISM: Homo sapiens
 297 <400> SEQUENCE: 12
 298 Met Glu Leu Thr Gln Pro Ala Glu Asp Leu Ile Gln Thr Gln Gln Thr
 299 1 5 10 15
 301 Pro Ala Ser Glu Leu Gly Asp Pro Glu Asp Pro Gly Glu Glu Ala Ala
 302 20 25 30
 304 Asp Gly Ser Asp Thr Val Val Leu Ser Leu Phe Pro Cys Thr Pro Glu
 305 35 40 45
 307 Pro Val Asn Pro Glu Pro Asp Ala Ser Val Ser Ser Pro Gln Ala Gly
 308 50 55 60
 310 Ser Ser Leu Lys His Ser Thr Thr Leu Thr Asn Arg Gln Arg Gly Asn
 311 65 70 75 80
 313 Glu Val Ser Ala Leu Pro Ala Thr Leu Asp Ser Leu Ser Ile His Gln
 314 85 90 95
 316 Leu Ala Ala Gln Gly Glu Leu Asp Gln Leu Lys Glu His Leu Arg Lys
 317 100 105 110
 319 Gly Asp Asn Leu Val Asn Lys Pro Asp Glu Arg Gly Phe Thr Pro Leu
 320 115 120 125
 322 Ile Trp Ala Ser Ala Phe Gly Glu Ile Glu Thr Val Arg Phe Leu Leu
 323 130 135 140
 325 Glu Trp Gly Ala Asp Pro His Ile Leu Ala Lys Glu Arg Glu Ser Ala
 326 145 150 155 160
 328 Leu Ser Leu Ala Ser Thr Gly Gly Tyr Thr Asp Ile Val Gly Leu Leu
 329 165 170 175
 331 Leu Glu Arg Asp Val Asp Ile Asn Ile Tyr Asp Trp Asn Gly Gly Thr
 332 180 185 190
 334 Pro Leu Leu Tyr Ala Val Arg Gly Asn His Val Lys Cys Val Glu Ala
 335 195 200 205
 337 Leu Leu Ala Arg Gly Ala Asp Leu Thr Thr Glu Ala Asp Ser Gly Tyr
 338 210 215 220
 340 Thr Pro Met Asp Leu Ala Val Ala Leu Gly Tyr Arg Lys Val Gln Gln
 341 225 230 235 240
 343 Val Ile Glu Asn His Ile Leu Lys Leu Phe Gln Ser Asn Leu Val Pro
 344 245 250 255
 346 Ala Asp Pro Glu
 347 260
 350 <210> SEQ ID NO: 13
 351 <211> LENGTH: 269
 352 <212> TYPE: PRT
 353 <213> ORGANISM: Murinae gen. sp.
 355 <400> SEQUENCE: 13
 356 Met Glu Pro Thr Gln Val Ala Glu Asn Leu Val Pro Asn Gln Gln Pro
 357 1 5 10 15
 359 Pro Val Pro Asp Leu Glu Asp Pro Glu Asp Thr Arg Asp Glu Ser Pro
 360 20 25 30
 362 Glu Asn Ser Asp Thr Val Val Leu Ser Leu Phe Pro Cys Thr Pro Asp
 363 35 40 45
 365 Ala Val Asn Pro Glu Ala Asp Ala Ser Ala Ser Ser Leu Gln Gly Ser
 366 50 55 60

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

<210> SEQ ID NO 18
<211> LENGTH: 220
<212> TYPE: PRT
<213> ORGANISM: Homo sapiens
<220> FEATURE:
<221> NAME/KEY: UNSURE
<222> LOCATION: 31
<221> NAME/KEY: UNSURE
<222> LOCATION: 148
<221> NAME/KEY: UNSURE
<222> LOCATION: 159
<400> SEQUENCE: 18



12:30 pm 11/07/01

Sequence listing as of
the above time and date.

Field 223 is required
to enumerate unknown Xaa
and possible values

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/840,243A

DATE: 10/29/2001

TIME: 13:29:32

Input Set : A:\B3991AB_SQL.txt

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L:496 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:18

L:496 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18

L:520 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:18

L:520 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18